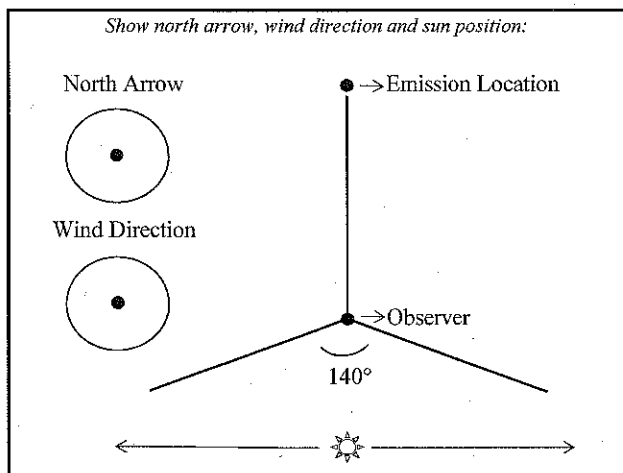


# METHOD 9 VISIBLE EMISSION OBSERVATION FORM

Date: April 6, 2016  
 Observer: Ethan Chatfield  
 Affiliation: U.S. EPA

Source name: AEP - Gavin Station  
 Source address: 7397 State Route 7 North  
Cheshire, Ohio 45620

Facility type: Coal-Fired power plant



Emission location (stack, roof, etc.): <u>Stack</u>	Estimated emission location height: <u>stack height = ~830 feet</u>
Direction from emission location: <u>East</u>	Estimated distance to emission location: <u>~2,500 feet</u>

Plume color: <u>bluish white</u>
Background: <u>sky</u>
Background color: <u>blue &amp; white</u>

Sky color: <u>blue/white</u>
Cloud color: <u>white</u>

Estimated wind speed: <u>~12 mph</u>
Approximate wind direction: <u>S to SW</u>

Temperature: <u>63 °F</u>
---------------------------

Additional Comments (photos/video taken, etc.): <u>M082 also completed</u>

40 C.F.R. Part 60, Appendix A, Reference Method 9

2.3 Observations. "Opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present."

2.3.1 Attached Steam Plumes. "When condensed water vapor is present within the plume as it emerges from the emission outlet, opacity observations shall be made beyond the point in the plume at which condensed water vapor is no longer visible. The observer shall record the approximate distance from the emission outlet to the point in the plume at which the observations are made."

2.3.2 Detached Steam Plume. "When water vapor in the plume condenses and becomes visible at a distinct distance from the emission outlet, the opacity of emissions should be evaluated at the emission outlet prior to the condensation of water vapor and the formation of the steam plume."

"On an overcast day when no shadows are observed and the lighting is diffuse or flat, this rule might not be as important from a scientific standpoint as on a bright, sunny day. Observers might have trouble defending their positions in court if they disregard the rule. The best practice for an observer is to always have the sun at his or her back, even if it is not visible and no shadows are cast." <http://www.epa.gov/ttn/emc/methods/VECourse.pdf>

Time	Minute	Seconds				Steam Plume?		Comments
		0	15	30	45	Attached	Detached	
12:27	1	30	35	50	60			
	2	65	45	35	65			
	3	60	55	60	60			
	4	60	75	65	65			
	5	70	40	60	65			
	6	60	60	55	70			
	7	60	55	60	60			
	8	60	60	70	60			
	9	50	65	65	65			
	10	60	70	65	70			
	11	50	45	60	80			
	12	70	50	45	50			
	13	45	35	35	40			Plume obscured, but still valid.
	14	40	50	40	45			
	15	50	30	50	45			White background starts
	16	50	50	50	40			
	17	40	35	30	40			
	18	35	40	40	40			
	19	30	40	30	30			
	20							
	21							
	22							
	23							
	24							
	25							
	26							
	27							
	28							
	29							
	30							

(Continued on other side →)

Signature: Ethan Chatfield  
 Date last certified: October 14, 2015